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Subject

EXAMINATION OF CHICKENS THAT
HAD BEEN MAINTAINED ON DIETS
CONTAINING DIBENZOXYDICHLORO-
DIPHENYL METHANE

File

Recd 8-15-47

4 8-8-49

Work by H.C. Spencer

86-870002-29

Irrelevant, Unlisted Chemical

To J. E. Johnson
(C File)

Check *Stubbins*
2-9-49

Recd. by *H.C. Spencer*
2-8-49
by *SSMC*

UNIT INDEX

Chickens maintained for 4 weeks and for 56 weeks on diets
containing 0.5% dihydroxydichlorodiphenylmethane

Irrelevant, Unlisted Chemical

showed no appreciable ill effects as com-
pared with chickens on the control diet for the same periods of
time.

INDEX HEADINGS

Methane, dihydroxydichlorodiphenyl

Preventol OD

2,2'-Methylene bis(4-chlorophenol)

04

SEP - 4 1987

Irrelevant, Unlisted Chemical

PROBLEM

Examination of chickens, that had been maintained for 4 weeks and 56 weeks on diets containing 0.3% dihydroxydichlorodiphenylmethane (K3579), in an effort to determine if any ill effects had been produced by such an experimental regimen.

Irrelevant, Unlisted Chemical

EXPERIMENTAL PROCEDURE

Groups of five chickens each (mixed sexes) that had been maintained for 4 weeks on diets containing 0.3% and on the control diet were submitted by *Irrelevant data* *personal* for examination. Red blood cell counts and hemoglobin determinations were obtained on all of the control and experimental animals. Each chicken was killed by decapitation and examined grossly for pathological lesions. The heart, liver and spleen were weighed and portions of the lungs, heart, liver, kidneys, spleen, and in some cases intestine and gizzard were preserved in formalin. Hematoxylin and eosin stained sections of these tissues were prepared for microscopic examination.

Irrelevant, Filing Data

After 56 weeks on the experimental diets the following groups of chickens were autopsied by Mr. D. R. Mussell and the formalin fixed tissues submitted for microscopic examination:

- 7 chickens on control diet
- 12 chickens on diet containing 0.3% K1409
- 12 chickens on diet containing 0.3% K3579

These chickens were examined in essentially the same manner as the earlier groups that received the experimental diets for

4 weeks, except no hematological studies were made, testes were weighed in the case of the males, and in only a few cases were portions of the kidney saved for histological study.

EXPERIMENTAL RESULTS

So far as can be judged from gross observation, hematological values (Table I), organ weights (Table I), and histological examination of the tissues, there was no appreciable difference between the control chickens and those that had received the diets containing 0.3% for either 4 weeks or 56 weeks.

Irrelevant, Filing Data

Varying numbers of large fat vacuoles were observed in the heart in the case of several of the 57-week old chickens (control as well as experimental); however, it is believed that this change is a common one in older chickens and, in all probability, is not associated in any way with dietary feeding of either

or Likewise, the occasional heavy, congested spleen is probably not a direct result of the experimental regimen.

Irrelevant, Filing Data

TABLE I

Summary of Organ Weight and Hematological Data on Chickens That
Received Diets Containing
1 Dihydroxydichlorodiphenylmethane (Irrelevant, Unlisted Chemical)

1,1-Dihydroxydichlorodiphenylmethane - Irrelevant, Unlisted Chemical														
Date Killed	Weeks on Diet	Compd. K No.	% in Diet	No. of Chickens	Age in Weeks	Sex	Body Wt. (g.)	Organ Wts. (g./100 g.)					RBC $\times 10^6$	Hb g./100
								Heart	Liver	Spleen	Testes	Gizzard		
8/15/47	4	Control	0.0	5	8	mixed sexes	564	0.53	2.29	0.21			3.80	
"	4		0.3	5	8		587	0.42	1.78	0.12			2.78	
Irrelevant, Unlisted Chemical								Irrelevant, Unlisted Chemical						
8/4/48	56	Control	0.0	3	57	M	2997	0.50	0.93	0.09	0.84		1.32	
"	56		0.3	2	57	M	3289	0.61	1.03	0.13	1.04		1.10	
Irrelevant, Unlisted Chemical														
"	56	Control	0.0	4	57	F	2296	0.33	1.55	0.09			1.29	
"	56		0.3	10	57	F	2245	0.49	1.68	0.12			1.57	
Irrelevant, Unlisted Chemical														

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